



LOCAL BLUE ECONOMY GROWTH FUND

A Fresh Coast Economic Corridor Program



Water Tech Solutions Guide 2026

*16 cutting-edge water tech
startups with innovative
solutions for Municipalities and
First Nations communities*

DEVELOPED BY



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INTRODUCTION

The new [Local Blue Economy Growth Fund](#) is an exciting opportunity for municipalities and First Nations communities to access funding and implement innovative solutions to the water issues you face.

This solutions guide will help you do just that.

AquaAction is proud to present a selection of 16 innovators in the water technology that are ready to help you and other Ontario municipalities and First Nations communities in developing impactful projects under the [Growth Fund](#).

The featured companies offer practical approaches to address key water challenges, including:

- stormwater management
- wastewater treatment
- pollution capture
- contaminant removal
- nutrient reduction
- monitoring (must be linked to freshwater improvement)
- climate resilience

Each profile provides a concise overview of the solution, its potential applications, and the types of pilot or demonstration projects that could be explored.

The goal of this guide is to facilitate connections between municipalities and First Nations communities and technology providers, to help identify solutions that align with local priorities and advance freshwater protection across Ontario and the Great Lakes region.

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Technologies addressing nutrient and contaminant runoff from agricultural activities.

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Wastewater Treatment

Solutions designed to treat wastewater, capture contaminants, and improve effluent quality.

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BUSINESS PROFILES

Goal:

Turn
wastewater into
fertilizer

Technology:

Modular system for
treating and
creating value from
manure, slurry and
organic residues
into precision
organic fertilizers.

Website:

circulusagtech.com



CIRCULUS AGTECH

Circulus Agtech develops circular nutrient-recovery solutions that transform agricultural waste streams, particularly animal manure, into eco-friendly fertilizer products. By converting organic residues into usable inputs for agriculture, the company helps reduce nutrient losses, support more sustainable fertilizer practices, and create value from materials that are often treated as waste. Its process is designed to eliminate pathogens, enabling safer fertilizer application in the field, and the technology also has potential applications in municipal wastewater through the recovery of valuable nitrogen for fertilizer production. A pilot project could involve adding their modular system to municipal water treatment.

Strategic value

Circulus Agtech helps reduce dependence on synthetic and mineral fertilizers, supports local value-creation of organic residual materials, and addresses nutrient-related environmental pressures. Its positioning is especially relevant for agriculture, greenhouses/hydroponics, livestock operations, and circular-economy projects linked to water and nutrient recovery.



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BUSINESS PROFILES

Goal:

Restore and
recycle
agricultural
wastewater

Technology:

Proprietary SCAD
technology
recovers water,
nutrients, and
organic materials
from agricultural
and
food-processing
residues

Website:

enviroscad.com



Service Enviro SCAD

Powering Resource Recovery

Service Enviro SCAD is a ClimateTech company that tackles the waste and destructive properties of nutrient runoff through a circular resource recovery infrastructure for agriculture. The proprietary SCAD technology recovers water, nutrients, and organic materials from agricultural and food-processing residues, unlocking the full value of organic resources. By turning waste into valuable resources, SCAD helps reduce emissions, improve resource efficiency, and support the transition to a circular economy.

Strategic value

By recovering water, nutrients, and organic materials, SCAD reduces the environmental impacts of organic waste disposal, including nutrient leaching and runoff that contribute to lake eutrophication and water pollution. At the same time, it supports circular agriculture, improves resource efficiency, and strengthens regional resilience through local resource recovery.



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BUSINESS PROFILES

Goal:

Revitalise wetlands as natural filters and conserving peat bogs as carbon sinks

Technology:

Bio-refinery and harvesting platform to process leaves and stem into horticulture substrate or pulp molded packaging.

Website:

typhacompany.com



Typha Co. is sustaining long-term remediation efforts of freshwater lakes by capturing and repurposing agriculture runoff nutrients into horticulture products, such as substrates and packaging. Harvesting cattail plants (typha spp.) is a critical step for freshwater remediation.

For every cubic meter of peat replaced with typha substrate 514 kg of CO2 equivalent are avoided and 45,142 cubic meters of water conserved, equivalent to ~ 17 olympic size swimming pools.

Harvesting typha removes 3.5 kg of phosphorus per hectare (IISD,2013). One hectare of wetland yields 10-15 tonnes of biomass and 1-3 tonnes of seeds; bringing rural economic return for marginal land of ~\$1000/hectare without accounting for derived carbon or phosphorus credits.

The vision is to create profitable watershed management by promoting nature-based solutions that conserve critical minerals (i.e. phosphorus) and non-renewable (i.e. peat) resources while ensuring climate-resilient agriculture and communities by rebuilding the loss of wetlands to provide flood and drought buffer.



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BUSINESS PROFILES

Goal:

Turn
wastewater
into fertilizer

Technology:

Wastewater and
animal waste
treatment
Natural fertilizers

Website :

valorix.ca



The Solurix® platform, developed by Valorix Inc., transforms an environmental liability—wastewater and animal manure—into a high-value-added solution that addresses climate change and economic challenges. Using an innovative process, Valorix extracts and transforms the nutrients contained in these effluents to produce renewable fertilizers equivalent to chemical fertilizers, while generating pure water as a byproduct.

The technology aims to reduce CO₂ emissions by **26,375** metric tons per unit annually.

Valorix offers integrated optimization of the nitrogen-phosphorus-carbon cycles, the extraction of valuable products, and complete local circularity. As part of a circular economy model, the solution replaces imported fossil-based fertilizers with locally produced fertilizers, thereby strengthening regional agricultural sovereignty.

Strategic Value:

The Valorix model is easily adopted without added investment, while generating recurring revenue through a turnkey service. Measurable, verifiable, and monetizable climate impact—creating both economic and environmental value.



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BUSINESS PROFILES

Goal :

Efficiently
monitor surface
water for
microplastics

Technology:

Sensor and
AI-powered
platform to identify
and analyze
microplastics

Website:

abbatekgroup.com



AbbaTek's web platform revolutionizes microplastics analysis, making it simpler, standardized, and accessible for all.

AbbaTek Group is an innovative social enterprise based in Newfoundland and Labrador, dedicated to making environmental data accurate, accessible, and actionable for every community and for every pollutant. Founded by a team of passionate data scientists, environmental policy experts, and engineers, AbbaTek develops technologies such as MPConnect, a platform that automates the identification and analysis of microplastics using artificial intelligence. This approach enables reproducible, affordable, and large-scale environmental measurements, even without specialized expertise.

By leveraging citizen science, the company empowers communities to actively participate in environmental monitoring. AbbaTek combines technological innovation, community engagement, and social impact to drive lasting change, always with a commitment to responsible economic growth.

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BUSINESS PROFILES

Goal:

Purify and
restore
contaminated
water

Technology:

Biochar filtration
system +
metagenomic
analysis

Website:

www.capturetech.org



Capture Tech is an environmental restoration company focused on circular biochar-based solutions. Its core offering, Biochar Capture Packs (BCPs), is presented as a modular filtration system for treating contaminated water and soil, with a broader objective of restoring ecosystems and supporting measurable environmental recovery.

Strategic value

The technology has applications in water quality restoration, nutrient capture and reuse, soil bioremediation, construction runoff management, industrial site restoration, and resource recovery, including metals, rare earth elements, fertilizers, and soil amendments.

The company provides services including: site assessment, installation, monitoring, maintenance, reuse, and impact reporting.

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BUSINESS PROFILES

Goal:

Purify and
restore
contaminated
water

Technology:

Electrochemical
water treatment

Website:

www.chembrains.ca



ChemBrains is a pioneer in effluent recycling and contaminant recovery using advanced electrochemical, photocatalytic, filtration, and oxidation processes for closed-loop water treatment.

ChemBrains technology uses an original approach to treat, recycle and reuse different sources of wastewaters (recreational, grey, rain, industrial). This solution features in-situ generation of powerful oxidants, enabling highly effective water treatment directly at the point of use. This fully automated system delivers clear and disinfected water on demand. Designed for efficiency and reliability, it offers a sustainable approach to water management tailored to operational needs.

This solution is particularly interesting for disinfection, control and treatment of water in closed-loop like water games, arena ice, or rainwater reuse.

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BUSINESS PROFILES

Goal:

Eliminate and destroy PFAS and other contaminants

Technology:

Integrated solutions that use electrochemical technologies

Website:

e2metrix.com

E2METRIX™

AN OVIVO COMPANY

E2METRIX is a water treatment technology company specializing in the on-site destruction of PFAS and emerging contaminants. Its integrated solutions combine concentration, electrochemical destruction, and purification technologies to mineralize PFAS into non-harmful end products, avoiding long-term disposal liabilities. An Ovivo company, E2METRIX helps industrial and municipal clients meet stringent regulations sustainably and cost-effectively.

Strategic value

E2METRIX's strategic value lies in its ability to help utilities and industrial operators address PFAS and other emerging contaminants through an onsite treatment approach designed not only to **capture them**, but to **destroy them**. This is important because it can reduce disposal liability, support regulatory compliance, and offer a more complete long-term risk-management solution than treatment methods that simply transfer contaminants elsewhere. Its modular and scalable design also makes it a credible option for organizations looking for practical implementation, not just promising technology.



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BUSINESS PROFILES

Goal:

Eliminate PFAs
and other
contaminants

Technology:

Smart
polymer-based
filtration solutions

Website:

ecofiltertek.com

**Ecofilter Tek**

Charge-Switching Technology

Ecofilter Tek is a forward-thinking cleantech startup that designs smart polymer-based filtration solutions for water and industrial applications. Co-founded by Dr. Farhad Farnia and Dr. Yue Zhao, the company champions Charge-Switching Technology, a proprietary innovation enabling advanced ion-exchange resins and membranes.

Ecofilter Tek's flagship product, AmphoRes™, targets PFAS contaminants with high efficiency, offering complete removal down to 0.2 ppt. Unlike traditional ion-exchange resins, AmphoRes™ can be regenerated using just water and caustic pH adjustments—no solvents needed—and is durable for up to six cycles. The company also offers AmphoPoly™, a smart polymer additive for cleaner, more productive membranes, particularly in dairy and food processing sectors.

Strategic value:

Aimed at sectors like dairy, food & beverage, pulp & paper, automotive, and municipal water treatment, Ecofilter Tek's technology not only delivers superior removal performance but also promotes sustainability through eco-friendly regeneration and prolonged media life.

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BUSINESS PROFILES

Goal:

Mitigate the effects of nutrient runoff

Technology:

Mobile barge using a proprietary phosphorus-absorbent media

Website:

www.lwnc.ca



Lakewater Nutrient Capture (LWNC) is a Winnipeg-based cleantech company. LWNC physically removes dissolved phosphorus – the nutrient behind harmful algal blooms and blue-green algae – directly from lakes, ponds, and harbours. Treatment is delivered from a mobile barge using a proprietary phosphorus-absorbent media. Nothing is added to the water: phosphorus is captured as water passes through, regeneration is done offsite, and the recovered phosphorus is reused as agricultural fertilizer.

Strategic value

Source-level fixes like wastewater upgrades and runoff management take years to fund and build. LWNC is the interim measure that deploys within a single season, drawing phosphorus down while long-term solutions are underway. For municipalities where blooms are already closing beaches or threatening water quality, LWNC is the last line of defense – protecting the water now, without adding anything to it.



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BUSINESS PROFILES

Goal:

Purify and
restore
contaminated
water

Technology:

Direct Potable
Reuse AI robot

Website:

www.neptune8.com

NEPTUNE8

Neptune8 enables development projects when centralized infrastructure is saturated or unavailable. The goal of our team at Neptune8 is to break barriers to drought-proof water and sanitation with decentralized, affordable Direct Potable Reuse (DPR)—the process of transforming wastewater into safe, high-quality drinking water, free from PFAS, microplastics and emerging contaminants. Our approach merges cutting-edge water treatment technologies with the full integration of robotics and artificial intelligence, providing an unprecedented level of safety.

Designed for buildings and small communities, our TRITON robots purify mixed wastewater and/or surface/groundwater and produce 10 M³ to 500+ M³ per day of truly potable water, for onsite reuse or environmental discharge.

Strategic value

TRITON is a decentralized water infrastructure working alongside centralized infrastructure to increase capacity, reduce costs, and destroy PFAS. The footprint of TRITON's treatment process is 75% smaller than a regular biological treatment. This enables compact onsite wastewater treatment, even in urban areas where land is usually unavailable for regular onsite WWTP.

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BUSINESS PROFILES

Goal:

Streamline the monitoring and management of wastewater and septic systems

Technology:

Cloud-Based
Municipal
Environmental
Management
Platform

Website:

www.nerri.ca



NERRI Municipal is a digital platform developed by O'Clair that enables municipalities to manage and monitor decentralized wastewater and septic systems entirely in real time. It centralizes records, supports instant reporting by contractors, improves regulatory compliance, and reduces municipal management time by up to 90%.

The City of Rigaud, Québec, provides a concrete municipal example. Developed in collaboration with the City's septic-system officer, the platform enables real-time monitoring of septic installations while adapting to evolving regulatory requirements.

In Ontario, we would like to explore a municipal pilot focused on digitizing septic-system records and improving inspections, maintenance tracking, compliance, and environmental protection.

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BUSINESS PROFILES

Goal:

Increase the efficiency of your wastewater treatment plant

Technology:

Modular, fixed-bed media solutions with built-in air diffusers

Website:

ecofixe.com



Technologies Ecofixe gives wastewater treatment plants a second life. Its ECOFIXE, BIOFIXE and AEROFIXE modules submerge directly into existing lagoons, basins, and other biological reactors, unlocking capacity and performance without new tanks or civil works.

ECOFIXE (BOD) + BIOFIXE (Ammonia) + AEROFIXE (Air)

ECOFIXE targets organic load (BOD) removal, while BIOFIXE handles ammonia, including year-round nitrification, even in cold water. Both are modular, fixed-bed media solutions with built-in air diffusers that install directly into an existing bioreactor. AEROFIXE may supplement aeration for ECOFIXE AND BIOFIXE installations – or run on its own to boost the aeration in any biological treatment site.

Strategic value

For municipalities and companies facing growth or tightening discharge limits, Ecofixe offers a faster, lower-cost path to more capacity – up to 60%+ less expensive than comparable upgrades, with no chemicals and installation in as little as a week. Already proven at municipal and industrial sites across Ontario and Quebec.



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BUSINESS PROFILES

Goal:

Decontaminate
and restore
freshwater

Technology: Nanosc
ale Water Treatment

Website: royalsands.ca



Royal Sands
CORPORATION

RSC treats contaminated water and renders the resulting waste easier to manage. Its process converts fine solids and suspended contaminants into stable particles that settle rapidly, producing cleaner water and a safer residue. It can address a range of municipal needs, including contaminant and sediment removal, nutrient reduction, and the remediation of ponds, lagoons, and industrial sites. Royal Sands also provides consulting services, assessing a community's water and designing a unique treatment based on integration with local ecosystems/environments.

Strategic Value

For a municipality, this delivers improved water quality, reduced waste for disposal, and stronger protection of local rivers, lakes and groundwater at lower cost. As each solution is tailored to local water chemistry, it is readily suited to rapid pilot projects and subsequent scaling efficiently.

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BUSINESS PROFILES

Goal:

Reduce
overall water
consumption

Technology:

Smart rainwater
harvesting
system

Website:

www.ecotime.ca

**ECOTIME**

Valorisation des ressources inutilisées

OASIS is Ecotime's smart rainwater harvesting system, built to capture rooftop stormwater before it ever reaches the sewer. Powered by IoT sensors and live weather forecasts, OASIS actively manages retention basin levels to maximize absorption ahead of heavy rain and preserve reserves through dry spells — reducing both sewer overflow and municipal drinking water consumption in a single integrated system.

Strategic value

OASIS is more than a building feature, it is decentralized urban water infrastructure. OASIS gives developers and public authorities a measurable, scalable tool to strengthen both building performance and city-wide water resilience. This infrastructure-first approach redefines the role of water management in construction, making every connected rooftop an active node in the urban water cycle.

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BUSINESS PROFILES

Goal:

Reduce overall water loss and consumption

Technology:

Super-hydrophobic tablets to prevent evaporation

Website:

www.waterpearls.ca



RHST Industries' WaterPearls are nature-inspired, inert, lightweight, non-porous, reusable, super-hydrophobic tablets that dramatically suppress water evaporation. Deploy once and let nature do the rest — no ongoing monitoring, power, or maintenance required.

Agriculture & Landscaping: In crop irrigation, drought-resilient farming, and forestry or landscaping projects, WaterPearls reduce soil water evaporation by up to 90% and cut overall water footprint by up to 50% — helping crops grow up to 30% more yield using 50% less water.

Reservoir & Pond Evaporation: Deployed as a floating cover on man-made ponds, treated wastewater reservoirs, and mining tailings ponds, WaterPearls suppress open-water evaporation by up to 90% — helping utilities and mining operators conserve stored water and reduce make-up water costs without altering water chemistry or requiring mechanical covers.

Stormwater & Site Management: In green stormwater infrastructure and on construction or mining sites, WaterPearls capture hydrocarbons in runoff before they reach waterways, offering a scalable, non-disruptive layer of protection against contaminated site drainage.



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